



State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER QUALITY

M/045/017

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JAN 20 1993

DIVISION OF
OIL GAS & MINING

January 13, 1993

Dave Beatty
Environmental Coordinator
Barrick Mercur Mine
P.O. Box 838
Tooele, Utah 84074

RE: Tailings Pond Permit No. UGW450002;
Cyanide Destruction Process Study -
Quarterly Report; Revised Water Quality
Sampling and Analysis Plan; Probable
Out-of-Compliance Status For
Compliance Monitoring Wells MW-1,
MW-8, MW-15 and MW-16

Dear Mr. Beatty:

Cyanide Destruction Process

We acknowledge receipt of the quarterly report for the Cyanide Destruction Process Study, submitted in accordance with Parts I.D.3 and I.G.6 of the above referenced permit. As a reminder, the year end summary for this study is due February 15, 1993. The results obtained will be used by the Executive Secretary as a basis for the determination of final effluent standards. We have no further comment at this time on the quarterly report.

Water Quality Sampling and Analysis Plan/ Well MW-8

We are also in receipt of your revised Water Quality Sampling and Analysis Plan prepared by Dames & Moore and submitted to our Division through your October 7, 1992 correspondence, received in our office on October 23, 1992. The modifications to the plan required in the permit and the plan modifications requested in our August 19, 1992 correspondence have been incorporated into this document to our satisfaction. This document entitled, Dames & Moore Quality Assurance Project Plan, dated October 21, 1992, is hereby approved and incorporated as an addendum to the above referenced permit. Additionally it satisfies Compliance Schedule item No. 1 of Part I.H of the above referenced permit.

With the modifications to well MW-8 outlined in the Dames and Moore correspondence dated October 28, 1992 we are satisfied that the low yielding well provisions of the RCRA-TEGD will be adhered to. However, because Probable Out-of-Compliance still exists for MW-8 Barrick will need to certify in writing the completion date of the proposed modifications to MW-8 and provide further explanation of why "Barrick feels that water quality resulting from present sampling of Well MW-8 is not adequately being characterized and that data obtained to date may not represent actual ground water conditions." (J.B. Brown, Oct. 28, 1992) Does the 14 or 15 gallons that drains back into the well from the standpipe during each sampling really have an impact on subsequent sampling results? What evidence do you have that can support this claim? How exactly was this well sampled before it was recognized by Barrick that low yielding wells require different sampling procedures? A response to these questions is requested within 30 days of receipt of this letter.

Well (T)MW-1

We are also in receipt of Barrick's "Response to Probable Out-of-Compliance Status - Reservation Canyon Tailings Impoundment Permit No. UGW450002" submitted by Dames and Moore through a correspondence dated October 28, 1992. On page three of that correspondence Barrick concludes that a Probable Out-of-Compliance status for (T)MW-1 does not exist and that the accelerated sampling requirements of the permit are not appropriate at this time. Inquires to local labs by Ground Water Section staff indicate that false positives for selenium at or near the detection limit occur on a relatively frequent basis. Because subsequent data did not indicate the presence of selenium we concur with this assessment and do not consider MW-1 to be in Probable Out-of-Compliance at this time.

Wells MW-15 & MW-16

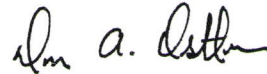
We acknowledge receipt of Barrick's November 30, 1992 letter regarding Probable Out-of-Compliance status concerning wells MW-15 & MW-16. Your placement of these wells onto a monthly schedule of sampling is appropriate. We understand by phone conversation with your staff that two monthly samples have been taken for both these wells since you notified us of the Probable Out-of-Compliance. The results of the first sampling event are expected shortly. Because mercury has not been previously detected in either of these wells, a continuing exceedence of protection levels would be cause to place these wells on Out-of-Compliance status. The simultaneous detection of mercury in two wells sampled 4 days apart and analyzed 15 days apart would be reason enough to suspect lab error or cross contamination between samples. Please check to insure that all equipment is being cleaned between samples, in accordance with the sampling and analysis plan approved in this letter. Also contact your lab and inquire into whether or not they had problems with mercury analysis during this time period. We believe that sampling or lab error is likely since these wells are separated by several hundred feet and are completed in different formations. In any case the confirmatory sampling will still be required.

Dave Beatty
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A response to the above questions is requested within 30 days of receipt of this letter. If you have any question concerning this letter, please contact Dennis Frederick at 538-6146.

Sincerely,

Utah Water Quality Board



Don A. Ostler, P.E.
Executive Secretary

DAO:DAF:gt

cc: Tooele County Health Department
Utah County Health Department
C.C. Patel, Design Evaluation Section
Div. Oil, Gas & Mining

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FILE:GROUND WATER\PERMIT UGW450002